## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Ī	13/846,856	03/18/2013	DAVID GORODYANSKY	10001.9	2475
	41729 Pavel Pogodin,	7590 06/15/202 Fsa	EXAMINER		
	TransPacific La			SCHWARTZ, DARREN B	
	Carolina, PR 00			ART UNIT	PAPER NUMBER
				2435	
					1
				NOTIFICATION DATE	DELIVERY MODE
				06/15/2020	FI ECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pavel@transpacificlaw.com ppogodin@gmail.com

### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

\_\_\_\_\_\_

Ex parte DAVID GORODYANSKY and EUGENE LAPIDOUS

Application 13/846,856 Technology Center 2400

Before LINZY T. McCARTNEY, MATTHEW J. McNEILL, and STEVEN M. AMUNDSON, *Administrative Patent Judges*.

McNEILL, Administrative Patent Judge.

#### **DECISION ON APPEAL**

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–20, which are all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Anchorfree, Inc. Appeal Br. 2.

<sup>&</sup>lt;sup>1</sup> We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as

#### STATEMENT OF THE CASE

#### Introduction

Appellant's application relates to using challenge-response tests to distinguish between human users and software applications on the Internet. Spec. ¶2. Claim 1 is illustrative of the appealed subject matter and reads as follows:

- 1. A computer-implemented method performed in a system comprising a central processing unit, a network adaptor and a memory, the method comprising:
- a. receiving, via the network adaptor, a request to access an Internet resource, the request being received from a request originator;
- b. providing, via the network adaptor, to the request originator a response comprising at least one challenge question and a plurality of answer options responsive to the challenge question;
- c. receiving, via the network adaptor, from the request originator a choice of one of the plurality of answer options; and
- d. allowing or denying, using the central processing unit, the access to the Internet resource based on the received choice of one of the plurality of answer options,

wherein the plurality of answer options comprise at least one answer of a first type which is a false answer to the at least one challenge question and at least two answers of a second type, which are not false answers to the same at least one challenge question.

## The Examiner's Rejections

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. *See* Final Act. 30–35.

Claims 1–20 stand rejected under 35 U.S.C. § 112(a) as failing to comply with the written-description requirement *See* Final Act. 35–36.

Claims 1–20 stand rejected under 35 U.S.C. § 112(a) as failing to comply with the enablement requirement *See* Final Act. 36–49.

Claims 1–20 stand rejected under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. *See* Final Act. 50–52.

Claims 1–5, 7, 11, 13, and 15–20 stand rejected under 35 U.S.C. § 103 as unpatentable over Kuo (US 2012/0192252 A1; July 26, 2012), King (US 2012/0054834 A1; Mar. 1, 2012), and Shepard (US 2010/0229223 A1; Sept. 9, 2010) or, in the alternative, Fang (US 8,732,089 B1; May 20, 2014). *See* Final Act. 52–57.

To the base combination, the Examiner adds Li (US 2010/0106671 A1; Apr. 29, 2010) to reject claim 6 (*see* Final Act. 57); Knox (US 2012/0066744 A1; Mar. 15, 2012) to reject claims 8–10 (*see* Final Act. 58–59); Guthrie (US 6,161,185; Dec. 12, 2000) to reject claim 12 (*see* Final Act. 59); and Peneder (US 2009/0276839 A1; Nov. 5, 2009) to reject claim 14 (*see* Final Act. 60).

### **ANALYSIS**

# Patent-Ineligible Subject Matter

An invention is patent eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Alice*, 573 U. S. at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 183 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We view respondents' claims as nothing more than a process for molding rubber

products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citation omitted) (citing *Benson* and *Flook*); *see*, *e.g.*, *id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (quotation marks omitted). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Id*. (alterations in original) (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id*.

In January 2019, the PTO published revised guidance on the application of § 101. USPTO's January 7, 2019 Memorandum, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 ("Revised Guidance"). Under that guidance, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure ("MPEP") §§ 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. *See* Revised Guidance.

# Revised Guidance Step 1

Step 1 of the Revised Guidance asks whether the claimed subject matter falls within the four statutory categories of patentable subject matter identified by 35 U.S.C. § 101: process, machine, manufacture, or composition of matter. *See* Revised Guidance. Claim 1 recites "[a] computer-implemented method performed in a system." Appellant does not argue the Examiner erred in concluding claim 1 falls within the four statutory categories of patentable subject matter. We agree with the Examiner's conclusion because claim 1 falls within the process category.

## Revised Guidance Step 2A, Prong 1

Under Step 2A, Prong 1 of the Revised Guidance, we determine whether the claims recite any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes). *See* Revised Guidance.

The Examiner determines claim 1 is directed to a challenge-response test to identify human users. *See* Final Act. 31. The Examiner determines the claimed steps are no different than a human engaging in a multiple choice test, a mental process that has long been performed using pencil and paper. *See* Ans. 8. The Examiner determines the claims merely automate this mental process using generic computers. *See id*.

Claim 1 recites "[a] computer-implemented method performed in a system comprising a central processing unit, a network adaptor and a memory." These components perform the claimed method, including "receiving . . . a request to access an Internet resource, the request being received from a request originator"; "providing . . . to the request originator a response comprising at least one challenge question and a plurality of answer options responsive to the challenge question"; "receiving . . . from the request originator a choice of one of the plurality of answer options"; and "allowing or denying . . . the access to the Internet resource based on the received choice of one of the plurality of answer options." The claim clarifies the nature of the answer options, reciting "wherein the plurality of answer options comprise at least one answer of a first type which is a false answer to the at least one challenge question and at least two answers of a

second type, which are not false answers to the same at least one challenge question."

We agree with the Examiner that these limitations, under their broadest reasonable interpretation, recite a challenge-response test to distinguish human users from computer software. The steps of the claimed method, under their broadest reasonable interpretation, recite concepts that are performed in the human mind, including observations, evaluations, and judgments. In particular, the "receiving . . . a request," "providing . . . a response," and "receiving . . . a choice" steps comprise a series of observations of question and answers. The "allowing or denying" step comprises an evaluation or judgment of whether the provided information indicates that the user is a human user or computer software. These steps may be performed in the human mind or using pen and paper. Accordingly, we conclude claim 1 recites concepts performed in the human mind, which fall within the mental processes category of abstract ideas identified in the Revised Guidance.

# Revised Guidance Step 2A, Prong 2

Under Step 2A, Prong 2 of the Revised Guidance, we next determine whether the claims recite additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)).

The "additional elements" recited in claim 1 include "a central processing unit," "a network adaptor," and "a memory." None of these additional elements constitute "additional elements that integrate the exception into a practical application."

To integrate the exception into a practical application, the additional claim elements must, for example, improve the functioning of a computer or

any other technology or technical field (*see* MPEP § 2106.05(a)), apply the judicial exception with a particular machine (*see* MPEP § 2106.05(b)), affect a transformation or reduction of a particular article to a different state or thing (*see* MPEP § 2106.05(c)), or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment (*see* MPEP § 2106.05(e)). *See* Revised Guidance.

Appellant argues claim 1 is directed to an improvement to computer technology, not an abstract idea. *See* Appeal Br. 7–12; Reply Br. 2. Appellant argues the task of determining whether a user is a human or computer is a critical task to the Internet infrastructure. *See* Appeal Br. 8. Appellant argues this task was traditionally performed by humans using empirical techniques, not by computer systems, and therefore the claimed invention allows computers to perform a function not previously performable by computers. *See id.* (citing *McRO*, *Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016); *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)). Appellant also argues the claims recite a particular solution to a particular problem, not merely the idea of a solution or outcome. *Id.* at 9.

Appellant has not persuaded us of Examiner error. Claim 1 recites providing a challenge question and a plurality of answer options in response to the challenge question, where the answer options include at least one false answer and at least two answers that are not false. The claim recites allowing or denying access to an Internet resource based on the user's choice responsive to this challenge question. Thus, claim 1 focuses on an evaluation of an answer to a multiple-choice question, not on any particular

improvement to technology. The critical task identified by Appellant—distinguishing human users from computers—is purportedly improved by the number of false and not false answers provided to the user, not any improvement to the underlying technology. Thus, the improvements identified by Appellant relate not to improved computers or other technology, but to advantages achieved by the abstract idea itself.

Indeed, Appellant admits that "[t]his task was traditionally performed by humans using empirical techniques and not by computer systems." Appeal Br. 8. Our reviewing court has "made clear that mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology." *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017). Like the claims in *Credit Acceptance*, the focus of claim 1 is on the business practice of distinguishing between human users and software applications, "and the recited generic computer elements 'are invoked merely as a tool." *Id.* (citing *Enfish*, 822 F.3d 1327); *see also Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015) (collecting cases). The claimed additional elements used to achieve the claimed results and are not focused on "a specific means or method that improves the relevant technology." *McRO*, 837 F.3d at 1314.

Appellant's argument that the claims recite a particular solution to a particular problem, and not the outcome, is unpersuasive. Claim 1 is not of the same nature as the claims in *McRO* and *Enfish*. In *McRO*, the claimed improvement allowed computers to produce accurate and realistic animations that previously could only be produced by human animators. *McRO*, 837 F.3d at 1313. The claims recited rules with certain

characteristics that allowed the computer to perform the animations. *Id*. Here, claim 1 broadly recites allowing or denying access to an Internet resource based on a user's choice responsive to a multiple-choice challenge question. Appellant has not persuasively identified an improvement to the underlying technology that arises from the format of the multiple-choice question.

Similarly, in *Enfish*, the claims related to organization of data in a table in computer memory and a system for indexing that data. *Enfish*, 822 F.3d at 1332. Claim 1, however, is not directed to such a technological improvement, instead broadly reciting an evaluation of an answer to a multiple-choice question.

Appellant also argues claim 1 requires the use of a computer and that the recited method cannot be performed using paper and pencil. *See* Reply Br. 2 (citing *Synopsys Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138 (Fed. Cir. 2016). Appellant has not persuaded us of Examiner error. First, Appellant admits that the task of distinguishing humans from computers was traditionally performed by humans using empirical techniques, not by computers. Appeal Br. 8. Second, automating this task, as in claim 1, "does not improve the functioning of the computer, make it operate more efficiently, or solve any technological problem." *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384–85 (Fed. Cir. 2019). Rather, the claim simply "includes instructions to implement an abstract idea on a computer" and "does no more than generally link the use of a judicial exception to a particular technological environment or field of use." 2019 Revised Guidance, 84 Fed. Reg. at 55.

Thus, Appellant has not persuaded us of Examiner error with respect to Step 2A, Prong 2 of the Revised Guidance. We, therefore, conclude the judicial exception is not integrated into a practical application under the Revised Guidance.

# Revised Guidance Step 2B

Under Step 2B of the Revised Guidance, we next determine whether the claims recite an "inventive concept" that "must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer." *BASCOM Glob*. *Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016). There must be more than "computer functions [that] are 'well-understood, routine, conventional activit[ies]' previously known to the industry." *Alice*, 573 U.S. at 225 (second alteration in original) (quoting *Mayo*, 566 U.S. at 73).

As discussed above, Appellant argues claim 1 is directed to an improvement to computer technology. *See* Appeal Br. 7–12; Reply Br. 2. Appellant argues claim 1 does not simply recite well-known business practices performed on a conventional computer. *See* Appeal Br. 11–12.

Appellant has not persuaded us of Examiner error. As explained above, Appellant's argument that the claims recite an improvement to computer technology is unpersuasive. Appellant's argument that claim 1 does not simply recite well-known business practices is also unpersuasive. Claim 1 recites a mental process, not an improvement to computer technology. Appellant has not persuasively identified any "inventive concept" sufficient to transform the claims from an abstract idea to a patent-eligible application. For these reasons, we agree with the Examiner (*see* 

Final Act. 31–35) that the claims do not recite an "inventive concept" sufficient to transform the claims from an abstract idea to a patent-eligible application. We, therefore, sustain the patent-ineligible subject matter rejection of claim 1. We also sustain the rejection of independent claims 16 and 20, which Appellant argues are patent eligible for the same reasons. *See* Appeal Br. 8–12; Reply Br. 2. We also sustain the rejection of dependent claims 2–15 and 17–19, for which Appellant relies on the same arguments. *See id*.

## Written Description

The Examiner finds claim 1 lacks written-description support for the limitations "false answer" and "not false answer." *See* Final Act. 35–36; Ans. 19–21. In particular, the Examiner finds the Specification is silent regarding answers being false or not false, instead describing answers are "right" or "obviously wrong." *See* Ans. 20.

Appellant argues the Examiner erred because the Specification sufficiently describes presenting answers that are right, which equates to not false, and obviously wrong, which equates to false. *See* Appeal Br. 13 (citing Spec. ¶¶ 50–52). We agree with Appellant.

The fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1564 (Fed. Cir. 1991). "[T]he written description requirement is satisfied by the patentee's disclosure of 'such descriptive means as words, structures, figures, diagrams, formulates, etc., that fully set forth the claimed invention." *Enzo Biochem*,

Inc. v. Gen-Probe Inc., 323 F.3d 956, 969 (Fed. Cir. 2002) (quoting Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997)). We agree with Appellant that an ordinarily skilled artisan would have understood the applicant was in possession of the invention as now claimed by disclosing examples including answers that are right, which equates to "not false," as claimed, and obviously wrong, which equates to "false," as claimed.

Accordingly, we do not sustain the Examiner's written-description rejection of claim 1. We also do not sustain the written-description rejection of independent claims 16 and 20, which recite commensurate subject matter, or dependent claims 2–15 and 17–19.

#### Enablement

The Examiner rejects claim 1 as failing to satisfy the enablement requirement because the Specification does not sufficiently describe how an ordinarily skilled artisan would practice the invention as claimed without undue experimentation with respect to the "false answer" and "not false answer" limitations. *See* Final Act. 36–49; Ans. 21–25.

Appellant argues the Examiner erred because an ordinarily skilled artisan would understand the scope of the limitations "false answer" and "not false answer." *See* Appeal Br. 14. We agree with Appellant for the same reasons as discussed above with respect to the written-description rejection. Accordingly, we do not sustain the Examiner's enablement rejection of claim 1. We also do not sustain the enablement rejection of independent claims 16 and 20, which recite commensurate subject matter, or dependent claims 2–15 and 17–19.

## Indefiniteness

Claim 1 recites, in relevant part, "providing . . . to the request originator a response comprising at least one challenge question and a plurality of answers options responsive to the challenge question." The Examiner rejects claim 1 as indefinite because "a plurality of answer options responsive to the challenge question" lacks antecedent basis for "the challenge question." Appellant does not argue the Examiner has erred in rejecting claim 1 for this reason. *See* Appeal Br. 15. Accordingly, we summarily sustain the indefiniteness rejection of claim 1. We also summarily sustain the indefiniteness rejection of independent claims 16 and 20 and dependent claims 3, 5–15, 17, and 18, for which Appellant offers no separate argument. *See id*.

The Examiner also rejects claim 1 as indefinite because the limitations "false answer" and "not false answer" are "unclear as to the metes and bounds of an answer which is either an 'incorrect answer' versus a 'correct answer.' It is unclear as to what answers qualify as either 'incorrect' or 'correct.'" Final Act. 50. The Examiner's rejection fails to address the current language of the claims, which recites "false answer" and "not false answer." Appellant argues the Examiner's rejection is in error. *See* Appeal Br. 15. We agree. An ordinarily skilled artisan would understand the metes and bounds of the limitations "false answer" and "not false answer," particularly in light of the examples in the Specification. *See* Spec. ¶¶ 50–52. Accordingly, we do not sustain the rejection of claims 1–20 as indefinite for reciting "false answer" and "not false answer."

The Examiner rejected claim 2 under 35 U.S.C. § 112(b) as being indefinite for the additional reason that the limitation "would normally be

understood by the human user but not by a computer" is indefinite. *See* Final Act. 51. The Examiner rejected claims 4 and 19 under 35 U.S.C. § 112(b) as being indefinite for the additional reason that "a past" is indefinite. *See id*. Appellant has not argued that these rejections are in error. *See* Appeal Br. 15. Accordingly, we summarily sustain the rejection of claims 2, 4, and 19 under 35 U.S.C. § 112(b).

#### **Obviousness**

We have reviewed the Examiner's obviousness rejections in light of Appellant's contentions that the Examiner has erred. We disagree with Appellant's contentions. Except as noted below, we adopt as our own: (1) the findings and reasons set forth in the obviousness rejections by the Examiner in the action from which this appeal is taken and (2) the reasons set forth by the Examiner in the Examiner's Answer in response to Appellant's Appeal Brief related to the obviousness rejections. We concur with the conclusions reached by the Examiner related to obviousness. We highlight the following additional points.

Appellant argues the Examiner erred in rejecting claim 1 as unpatentable over Kuo, King, and Shepard or Fang. *See* Appeal Br. 16–18; Reply Br. 5–6. In particular, Appellant argues none of the cited references teaches or suggests "wherein the plurality of answer options comprise at least one answer of a first type which is a false answer to the at least one challenge question and at least two answers of a second type, which are not false answers to the same at least one challenge question." *See id.* Appellant argues the Examiner's reliance on Fang for this limitation is misplaced because although Fang teaches a plurality of answers, Fang is silent regarding how many false and not false answers are present in its test. *See* 

Appeal Br. 18 (citing Fang, Figs. 4, 5); Reply Br. 5–6 (citing Fang, Figs. 4, 5).

Appellant has not persuaded us of Examiner error. The Examiner finds Fang teaches a plurality of answer options including at least one answer which is a false answer and at least two answers which are not false answers. *See* Final Act. 55 (citing Fang, Figs. 4, 5, 2:15–16, 7:55–8:12, 9:3–35, 10:7–11:59). Fang teaches presenting a user with a plurality of answer options to a challenge question. *See*, *e.g.*, Fang 9:3–35. These answer options may include at least two correct answers and several incorrect answers. *See id.* Thus, contrary to Appellant's argument, Fang explicitly teaches how many false and not false answers are present in its test.

Accordingly, we sustain the obviousness rejection of claim 1. We also sustain the obviousness rejection of independent claims 16 and 20, which Appellant argues are patentable for the same reasons. *See* Appeal Br. 16–22; Reply Br. 5–6. We also sustain the obviousness rejection of dependent claims 2–15 and 17–19, for which Appellant relies on the same arguments. *See id*.

### **DECISION SUMMARY**

# In summary:

Claims	35	Reference(s)/Basis	Affirmed	Reversed
Rejected	U.S.C.			
	§			
1–20	101	Eligibility	1–20	
1–20	112(a)	Written Description		1–20
1–20	112(a)	Enablement		1–20
1–20	112(b)	Indefiniteness	1–20	
1–5, 7, 11, 13,	103	Kuo, King,	1–5, 7, 11,	
15–20		Shepard/Fang	13, 15–20	

6	103	Kuo, King,	6
		Shepard/Fang, Li	
8–10	103	Kuo, King,	8–10
		Shepard/Fang, Knox	
12	103	Kuo, King,	12
		Shepard/Fang, Guthrie	
14	103	Kuo, King,	14
		Shepard/Fang, Peneder	
Overall			1–20
Outcome			

## CONCLUSION

Because we have sustained at least one ground of rejection with respect to each claim on appeal, we affirm the decision of the Examiner rejecting claims 1–20. *See* 37 C.F.R. § 41.50(a)(1).

## TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

## **AFFIRMED**